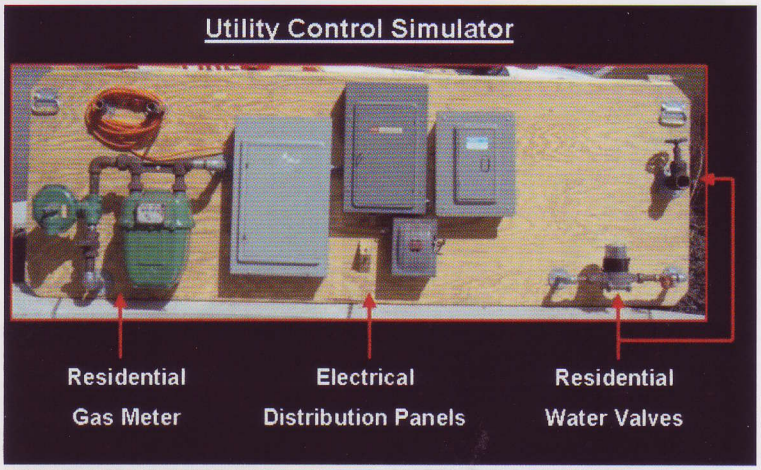
Prop Shop: 2005-4

UTILITY CONTROL SIMULATOR

Mt. Lebanon Fire Department **Pittsburgh, PA 15228**

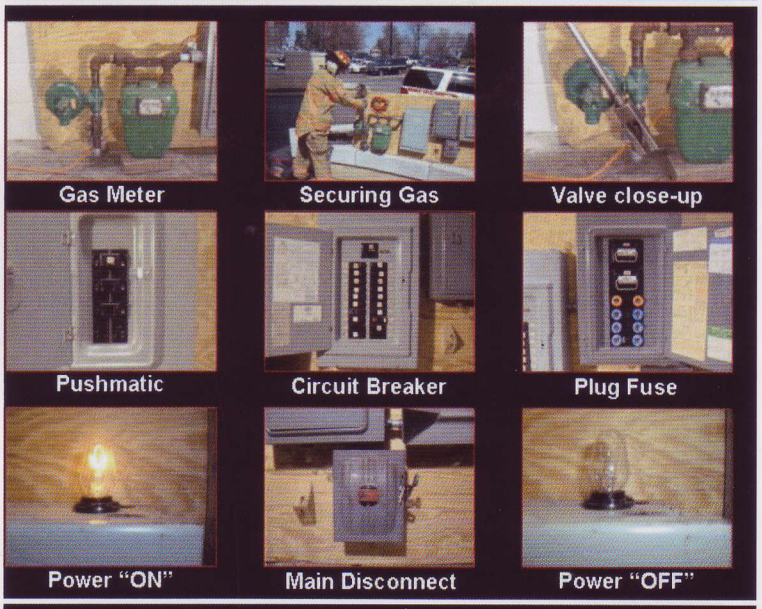
UTILITY CONTROL SIMULATOR

The Utility Control Simulator was designed as a training aid to be used in conjunction with the Pennsylvania State Fire Academy's Essentials of Fire Fighting curriculum, Lesson 18, Rescue and Utility Control, and IFSTA, Essentials of Fire Fighting, Fire Control, pp. 533-540. Skills involve securing a residential gas meter, a water meter, four types of electric distribution panels, and the operation of different types of residential valves.



Construction Materials

The supplies needed to construct the Utility Control Simulator include: 1 sheet 3/4" plywood, 5 – 2x4x8, 1-5/8" deck screws, 2-1/2" wood screws, three hinges, two short links of chain, a residential gas meter and water meter obtained from respective utility companies, a gate valve, a ball valve, a disconnect switch, and Pushmatic, cartridge and plug fuse, and circuit breaker electric distribution panels obtained during renovations of local residences. Each electrical distribution panel is equipped with a light bulb (Photo 2) that is wired to the panel so that the proper combination of circuit breakers and/or fuses is required to successfully disconnect electric power thereby shutting off the light bulb. The electric distribution panels are powered by 110V supply cord (extension cord). The supply cord should be plugged into a 15 or 20 AMP, fused, ground-fault current interrupter (GFCI) protected circuit.



Recommended Drills:

Step 1: Securing a residential gas meter

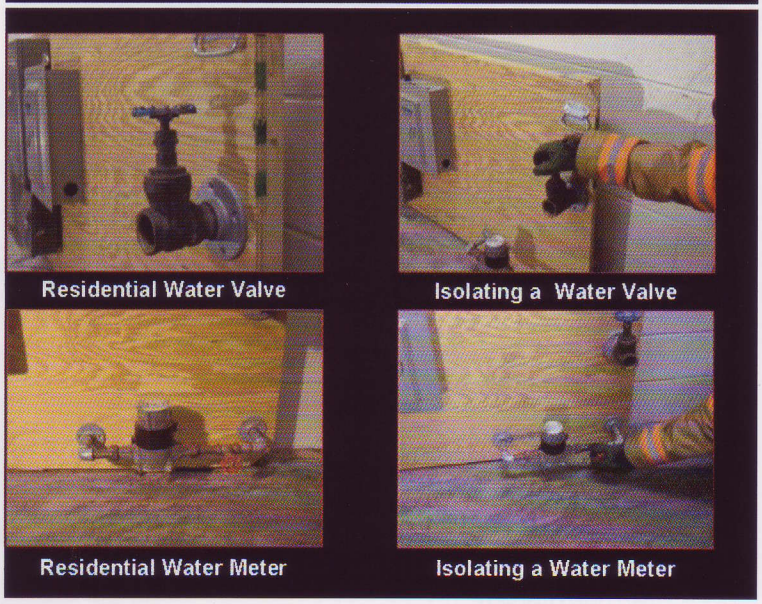
Step 2: Securing a residential water meter

Step 3: Pushmatic electric distribution panel (each individual circuit breaker must be pushed to secure power)

Step 4: Disconnect Switch (main disconnect arm must be down to secure power)

Step 5: Plug fuse distribution panel (both mains must be closed to secure power)

Step 6: Circuit Breaker (main must be closed to secure power)



For more information concerning this prop, contact Roger Ricciuti, rricciuti@mtlebanon.org, or Nick Sohyda, nsohyda@mtlebanon.org.